

proportion to the strength which it will ultimately attain, and it may be ill adapted to the purposes of labour.

Mr. Knight remarks, that with respect to sex also, the influence of the female entirely predominates, as particular females will produce all their offspring of one sex, either male or female; but by attending to the numerous offspring of a single bull, ram, or horse, he has never witnessed any considerable difference in the numbers of the two sexes.

The size and form of the eggs of oviparous animals being dependent wholly on the female, regulate of course the size of the offspring, and in this respect resemble the seeds of plants; but their formation, nevertheless, appears to depend on different laws; for the eggs of birds, fishes, and insects, attain their full size in total independence of the male; but in seeds, on the contrary, the whole internal organization depends on the influence of the male. For though a gourd may produce fruit, apparently perfect, without impregnation, and although even the seed-coats acquire their natural size and form, these coats are perfectly empty, without the slightest vestige of cotyledons or plumula, or anything that appears to correspond with the internal organization of a complete seed.

*On the Effect of westerly Winds in raising the Level of the British Channel. In a Letter to the Right Hon. Sir Joseph Banks, Bart. K.B. P.R.S., By James Rennell, Esq. F.R.S. Read June 22, 1809. [Phil. Trans. 1809, p. 400.]*

The recent loss of the Britannia East Indiaman having appeared to the author intimately connected with those observations which he formerly communicated to the Society concerning a current that occasionally prevails to the westward of Scilly, he has thought the circumstances deserving of particular inquiry, as it may be of use to record them as a warning against dangers which may probably be avoided.

During the prevalence of westerly winds, it is well known that they occasion the height of the tides to be greater in the southern parts of Great Britain, even as much as ten feet, in violent storms from that quarter; and it has also been remarked, that the flood-tide runs an hour or more longer than at common times; or, in other words, that a current overcomes the ebb-tide. And since the direction of this current must be influenced by the form of the adjacent shores, it is evident that the shore in the neighbourhood of Boulogne, which tends very directly northward, will cause a northerly current through the Straits of Dover.

It appears to have been under these circumstances, that the Britannia was lost. Having been driven up the Straits by a violent gale from the south-west in thick weather, which prevented a view of the lights, the pilot was left entirely to the reckoning and the lead; but as he was not aware of the unusual current that prevailed, he was driven unexpectedly on the back, or eastern side of the Goodwin Sands.